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Application No. 10/815,384
Amendment dated December 17, 2008
Reply to Office Action of September 17, 2008

Docket No.: 103514-0011-103

AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** A method for treating tissue using ultrasonic energy comprising the steps of:
applying a medicament to tissue; and
delivering ultrasonic energy from a non-contact distance from the tissue and the medicament to the medicament and to the tissue, wherein the ultrasonic energy is delivered simultaneously with delivery of a liquid spray and has intensity capable of penetrating the tissue to a beneficial depth to provide a therapeutic effect to the tissue, and wherein the ultrasonic energy sonicates the medicament and causes the medicament to penetrate the tissue to a beneficial depth to provide a therapeutic effect to the tissue.
2. **(Previously presented)** The method according to claim 1, wherein the ultrasonic energy has an intensity capable of penetrating the tissue to a beneficial depth to provide a therapeutic effect to the tissue.
3. **(Previously presented)** The method according to claim 1, further including the step of generating the ultrasonic energy with a particular amplitude indicative of an intensity capable of achieving the therapeutic effect.
4. **(Previously presented)** The method according to claim 3, further including the step of generating the ultrasonic energy with a frequency capable of achieving the particular amplitude.
5. **(Previously presented)** The method according to claim 3, wherein the particular amplitude is at least 3 microns.
- 6-7. **(Cancelled)**
8. **(Previously presented)** The method according to claim 3, wherein the particular amplitude

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is at least 10 microns.

9. **(Previously presented)** The method according to claim 4, wherein the frequency is in the range of 20kHz-5MHz.

10. **(Previously presented)** The method according to claim 4, wherein the frequency is in the range of 20-200kHz.

11. **(Previously presented)** The method according to claim 4, wherein the frequency is in the range of 20-40kHz.

12. **(Previously presented)** The method according to claim 1, wherein the applying step is performed prior to the delivery step.

13. **(Previously presented)** The method according to claim 1, wherein the applying step is performed during the delivering step.

14. **(Previously presented)** The method according to claim 1, wherein the steps of the method are included in a series of treatments wherein another treatment of the series of treatments is selected from the group consisting of:

the treatment including the steps of delivering ultrasonic energy from a non-contact distance to the tissue simultaneous with delivery of a spray to the tissue, wherein the ultrasonic energy has an intensity capable of penetrating the tissue to a beneficial depth to provide a therapeutic effect to the tissue and sonicating the spray for causing the spray to penetrate the tissue to a beneficial depth to provide a therapeutic effect to the tissue;

the treatment including the steps of delivering ultrasonic energy from a non-contact distance to the tissue through a substantial expanse of a substantially purely gaseous medium to the tissue, wherein the ultrasonic energy has an intensity capable of penetrating the tissue to a beneficial depth to provide a therapeutic effect to the tissue; and

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the treatment including the steps of the method of the invention, wherein a different medicament is applied.

15. **(Previously presented)** The method according to claim 1, wherein the medicament is selected from the group consisting of: an antibiotic, an ointment, cream, gel, liquid, salve, oil, powder, antibacterial agent, antiseptic agent, insulin, analgesic agent, conditioner, surfactant, emollient, or other active ingredient.

16. **(Currently amended)** The method according to claim 1, wherein the step of delivering includes the step of providing means for delivering the ultrasonic energy at a distance from 2.5 mm-51 cm from the tissue and the medicament.

17. **(Previously presented)** The method according to claim 1, wherein the therapeutic effect is selected from the group consisting of increasing blood flow to the tissue, providing a local anesthetic effect and stimulating cell growth.

18-36. **(Cancelled)**

37. **(Currently amended)** A method for treating a wound comprising the steps of:
applying a medicament to a wound;
providing a transducer having a distal radiation surface for generating and emitting ultrasonic energy;
introducing a liquid to the distal radiation surface to produce a spray; and
delivering the generated and emitted ultrasonic energy to the wound through the spray from a non-contact distance from the surface of the wound and from the medicament applied to the wound, wherein the generated ultrasonic energy and emitted ultrasonic energy penetrates the wound tissue to a beneficial depth to provide a therapeutic effect for decreasing the healing time for the wound, and wherein the non-contact distance is at least 2.5mm from the surface of the wound.

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38. **(Previously presented)** The method according to claim 37, wherein the generating step includes generating the ultrasonic energy with a particular amplitude indicative of an intensity capable of achieving the therapeutic effect.
39. **(Previously presented)** The method according to claim 38, wherein the generating step further includes the step of generating the ultrasonic energy with a frequency capable of achieving the particular amplitude.
40. **(Previously presented)** The method according to claim 39, wherein the frequency is in the range of 20kHz – 5MHz.
41. **(Previously presented)** The method according to claim 39, wherein the frequency is in the range of 20-200kHz.
42. **(Previously presented)** The method according to claim 39, wherein the frequency is in the range of 20-40kHz.
43. **(Previously presented)** The method according to claim 37, wherein said transducer has a radiation surface with a surface area dimensioned for achieving delivery of the ultrasonic energy to the wound with an intensity capable of achieving the therapeutic effect.
44. **(Previously presented)** The method according to claim 37, wherein said transducer has a radiation surface with a rounded perimeter for achieving delivery of the ultrasonic energy to the wound with an intensity capable of achieving the therapeutic effect.
45. **(Previously presented)** The method according to claim 37, further comprising the steps of: providing a transducer for delivering the ultrasonic energy having a radiation surface; and selecting at least one of a size of a surface area of the radiation surface, a shape of a peripheral boundary of the radiation surface, a frequency of the generated ultrasonic energy, and an

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amplitude of the generated ultrasonic energy for achieving delivery of ultrasonic energy to the wound with an intensity capable of achieving the therapeutic effect.

46. **(Previously presented)** The method of claim 37, further comprising the steps of:
providing a transducer for delivering the ultrasonic energy having a radiation surface; and
selecting a combination of a size of a surface area of the radiation surface, a shape of a peripheral boundary of the radiation surface, a shape of the curvature of the radiation surface selected from one of flat, concave, convex and a combination thereof, a frequency of the generated ultrasonic energy, and an amplitude of the generated ultrasonic energy for achieving the therapeutic effect.

47. **(Previously presented)** The method according to claim 37, wherein the radiation surface is positioned from 2.5mm-51cm from the surface of the wound.

48. **(Previously presented)** The method according to claim 37, wherein the generating step includes the steps of generating the ultrasonic energy with a constant or modulated frequency having a wave form selected from the group consisting of sinusoidal, rectangular, trapezoidal, and triangular wave forms.

49. **(Previously presented)** The method according to claim 37, wherein the liquid does not include a medicament.

50-62. **(Cancelled)**

63. **(Previously presented)** A method for treating a wound comprising the steps of:
applying a medicament to a wound;
generating ultrasonic energy having a particular amplitude and a particular frequency; and
delivering the generated ultrasonic energy to the wound through a liquid spray from a non-contact distance from the medicament and from the surface of the wound, wherein the generated

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ultrasonic energy penetrates the wound tissue to a beneficial depth to provide a therapeutic effect for decreasing the healing time for the wound, wherein the particular amplitude is indicative of an intensity capable of achieving the therapeutic effect, and wherein the non-contact distance is at least 2.5mm from the surface of the wound.

64. **(Previously presented)** The method according to claim 63, wherein the ultrasonic energy has an amplitude of at least 3 microns.
65. **(Previously presented)** The method according to claim 63, wherein the ultrasonic energy has an amplitude of at least 10 microns.
66. **(Previously presented)** The method of claim 63, wherein the liquid spray does not include a medicament.
67. **(Previously presented)** The method according to claim 37, wherein the medicament penetrates the wound to a beneficial depth to provide a therapeutic effect to the wound.
68. **(Previously presented)** The method according to claim 63, wherein the medicament penetrates the wound to a beneficial depth to provide a therapeutic effect to the wound.
69. **(Previously presented)** The method according to claim 37, wherein the medicament is selected from the group consisting of: an antibiotic, an ointment, cream, gel, liquid, salve, oil, powder, antibacterial agent, antiseptic agent, insulin, analgesic agent, conditioner, surfactant, emollient, or other active ingredient.
70. **(Previously presented)** The method according to claim 63, wherein the medicament is selected from the group consisting of: an antibiotic, an ointment, cream, gel, liquid, salve, oil, powder, antibacterial agent, antiseptic agent, insulin, analgesic agent, conditioner, surfactant, emollient, or other active ingredient.

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71. **(Previously presented)** The method according to claim 63, wherein the step of delivering includes the step of providing means for delivering the ultrasonic energy at a distance from 2.5 mm-51 cm from the wound.

72. **(Previously presented)** The method according to claim 37, wherein the therapeutic effect is selected from the group consisting of increasing blood flow to the tissue, providing a local anesthetic effect and stimulating cell growth.

73. **(Previously presented)** The method according to claim 63, wherein the therapeutic effect is selected from the group consisting of increasing blood flow to the tissue, providing a local anesthetic effect and stimulating cell growth.

74. **(Previously presented)** The method according to claim 37, comprising delivering ultrasonic energy from a non-contact distance from the medicament and the wound.

75. **(Previously presented)** The method according to claim 63, comprising delivering ultrasonic energy from a non-contact distance from the medicament and the wound.

76. **(Previously presented)** The method of claim 37, wherein the medicament is applied before the ultrasonic energy is delivered to the wound.

77. **(Previously presented)** The method of claim 63, wherein the medicament is applied before the ultrasonic energy is delivered to the wound.

78. **(Previously presented)** The method of claim 37, wherein the medicament is applied during delivery of the ultrasonic energy to the wound.

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79. **(Previously presented)** The method of claim 63, wherein the medicament is applied during delivery of the ultrasonic energy to the wound.

80. **(Previously presented)** The method according to claim 67, wherein the medicament is selected from the group consisting of: an antibiotic, an ointment, cream, gel, liquid, salve, oil, powder, antibacterial agent, antiseptic agent, insulin, analgesic agent, conditioner, surfactant, emollient, or other active ingredient.

81. **(Previously presented)** The method according to claim 68, wherein the medicament is selected from the group consisting of: an antibiotic, an ointment, cream, gel, liquid, salve, oil, powder, antibacterial agent, antiseptic agent, insulin, analgesic agent, conditioner, surfactant, emollient, or other active ingredient.

82-92. **(Cancelled)**